

Claims

- [1] A washing machine comprising:
a tub in a cabinet;
a venting unit for making the tub to be in communication with an outside of the cabinet; and
sound insulation means in the venting unit for blocking noise from leaking from the tub to the outside of the cabinet.
- [2] The washing machine as claimed in claim 1, wherein the venting unit includes;
a vent hole projected from a top of the tub;
a vent pipe secured to the cabinet, and
bellows connected between the vent hole and the vent pipe.
- [3] The washing machine as claimed in claim 2, wherein the vent pipe includes;
a connection portion placed in the vent hole, and
a fastening portion for fastening the connection portion to the cabinet.
- [4] The washing machine as claimed in claim 3, wherein the sound insulation means is mounted to the connection portion of the vent pipe.
- [5] The washing machine as claimed in claim 4, wherein the sound insulation means is at least one blocking wall for blocking noise introduced into the vent pipe.
- [6] The washing machine as claimed in claim 5, wherein the blocking wall includes;
one pair of first blocking walls projected opposite to each other, and
one pair of second blocking walls projected opposite to each other arranged at a predetermined distance in rear of the one pair of first blocking walls.
- [7] The washing machine as claimed in claim 6, wherein the one pair of the first blocking walls and the one pair of the second blocking walls are arranged to cross each other.
- [8] The washing machine as claimed in claim 7, wherein the blocking wall has at least one rib at a rear of the blocking wall for supporting the blocking wall.
- [9] The washing machine as claimed in claim 5, wherein the blocking wall includes a first blocking wall and a second blocking wall, and the vent pipe has a zigzag form of inside flow path.
- [10] The washing machine as claimed in claim 5, wherein the blocking walls are tilted the more as it goes toward to a center of the vent pipe the more.
- [11] The washing machine as claimed in claim 10, wherein the blocking wall has at least one rib at a rear of the blocking wall for supporting the blocking wall.

- [12] A washing machine comprising:
a tub in a cabinet;
a venting unit for making the tub to be in communication with an outside of the cabinet; and
a chamber portion provided to the venting unit for blocking noise from leaking from the tub to an outside of the cabinet.
- [13] The washing machine as claimed in claim 12, wherein the venting unit includes;
a vent hole projected from a top of the tub;
a vent pipe secured to the cabinet, and
bellows connected between the vent hole and the vent pipe.
- [14] The washing machine as claimed in claim 13, wherein the vent pipe includes;
a connection portion placed in the vent hole, and
a fastening portion for fastening the connection portion to the cabinet.
- [15] The washing machine as claimed in claim 14, wherein the chamber portion is at the connection portion of the venting pipe.
- [16] The washing machine as claimed in claim 15, wherein the chamber portion includes;
a first chamber having first/second blocking walls spaced a predetermined distance from each other, to form a hole between the blocking walls, and
a second chamber having first/second blocking walls spaced a predetermined distance from each other, to form a hole between the blocking walls,
wherein the chambers are arranged to have a gap 'd' of a predetermined distance.
- [17] A washing machine comprising:
a cabinet having a laundry opening in a front center;
a tub suspended in the cabinet with springs and dampers, having an opening in rear of the laundry opening;
a drum rotatably mounted in the tub having an opening in rear of the laundry opening for receiving the laundry, and water holes in a circumferential surface;
a driving motor mounted on a rear wall of the tub for rotating the drum;
a water supply unit for supplying detergent or water to the tub and a draining unit for draining water from the tub to an outside of the washing machine;
a gasket in front of the tub for preventing both water in the tub and the laundry in the drum from flowing away between the tub and the cabinet;
a venting unit including a vent hole projected from a top of the tub, a vent pipe secured to the cabinet, and bellows connected between the vent hole and the vent

pipe; and

a blocking unit to the vent pipe for blocking noise from leaking from the tub to an outside of the cabinet.

[18] The washing machine as claimed in claim 17, wherein the blocking unit includes;

one pair of first blocking walls projected opposite to each other, and
one pair of second blocking walls projected opposite to each other in rear of the one pair of the first blocking walls.

[19] The washing machine as claimed in claim 17, wherein the blocking unit includes first and second blocking walls projected to form a zigzag inside flow path in the vent pipe.

[20] The washing machine as claimed in claim 17, wherein the blocking unit includes;

a first chamber having first/second blocking walls spaced a predetermined distance from each other, with a hole in each of the blocking wall, and
a second chamber having first/second blocking walls spaced a predetermined distance from each other, with a hole in each of the blocking wall,
wherein the chambers are arranged to have a predetermined gap therebetween.